

Title (en)

ADDITIVELY MANUFACTURED EXTRUDER COMPONENT INCLUDING LATTICE

Title (de)

GENERATIV GEFERTIGTE EXTRUDERKOMPONENTE MIT GITTER

Title (fr)

ÉLÉMENT D'EXTRUDEUSE FABRIQUÉ DE MANIÈRE ADDITIVE COMPRENANT UN TREILLIS

Publication

EP 4013597 A4 20230830 (EN)

Application

EP 20853482 A 20200814

Priority

- US 201962886825 P 20190814
- US 2020046393 W 20200814

Abstract (en)

[origin: WO2021030695A1] Disclosed are additively manufactured extruder components comprising a lattice structure formed within a structural support frame that defines an impervious surface and an axial aperture. An axial aperture of a screw segment is configured to couple to a drive shaft, and its impervious surface is configured to contact extrudable material. An axial aperture of a barrel segment is configured to contact extrudable material.

IPC 8 full level

B29C 48/395 (2019.01); **B22F 3/11** (2006.01); **B22F 5/08** (2006.01); **B29C 48/36** (2019.01); **B29C 48/57** (2019.01); **B29C 48/68** (2019.01); **B29C 48/76** (2019.01)

CPC (source: EP US)

B22F 3/1115 (2013.01 - EP); **B22F 5/08** (2013.01 - EP); **B22F 5/106** (2013.01 - EP); **B22F 10/28** (2021.01 - EP); **B22F 10/38** (2021.01 - EP); **B29C 48/2564** (2019.02 - US); **B29C 48/2565** (2019.02 - US); **B29C 48/25684** (2019.02 - US); **B29C 48/40** (2019.02 - US); **B29C 48/501** (2019.02 - US); **B29C 48/507** (2019.02 - EP US); **B29C 48/509** (2019.02 - US); **B29C 48/57** (2019.02 - US); **B29C 48/6801** (2019.02 - US); **B29C 48/682** (2019.02 - US); **B29C 48/763** (2019.02 - EP); **B33Y 10/00** (2014.12 - EP); **B33Y 50/02** (2014.12 - EP); **B33Y 80/00** (2014.12 - EP); **B22F 2998/10** (2013.01 - EP); **B22F 2999/00** (2013.01 - EP); **B29C 48/03** (2019.02 - EP); **B29C 48/2564** (2019.02 - EP); **B29C 48/25684** (2019.02 - EP); **B29C 48/503** (2019.02 - EP); **B29C 48/57** (2019.02 - EP); **B29C 48/682** (2019.02 - EP); **B29C 48/767** (2019.02 - EP); **B33Y 80/00** (2014.12 - US)

C-Set (source: EP)

1. **B22F 2999/00 + B22F 5/106 + B22F 5/08 + B22F 3/1115 + B22F 3/20**
2. **B22F 2998/10 + B22F 10/28 + B22F 2003/242 + B22F 10/25**
3. **B22F 2999/00 + B22F 10/38 + B22F 10/36 + B22F 3/1115 + B22F 2203/15**

Citation (search report)

- [XA] WO 2017103061 A1 20170622 - MICHELIN & CIE [FR], et al
- [A] US 2014014493 A1 20140116 - RYAN ROBERT C [US]
- [A] CN 106694884 A 20170524 - XI'AN BRIGHT LASER TECH LTD

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2021030695 A1 20210218; EP 4013559 A2 20220622; EP 4013559 A4 20230823; EP 4013597 A1 20220622; EP 4013597 A4 20230830; JP 2022544565 A 20221019; JP 2022545192 A 20221026; MX 2022001825 A 20220418; MX 2022001826 A 20220418; US 2022297369 A1 20220922; US 2022314517 A1 20221006; WO 2021030693 A2 20210218; WO 2021030693 A3 20210325

DOCDB simple family (application)

US 2020046393 W 20200814; EP 20852892 A 20200814; EP 20853482 A 20200814; JP 2022509138 A 20200814; JP 2022509172 A 20200814; MX 2022001825 A 20200814; MX 2022001826 A 20200814; US 2020046388 W 20200814; US 202017635331 A 20200814; US 202017635336 A 20200814